COMMENT                                          Enhancement Request Number 45
ajosey:rdg.opengroup.org                      Bug in XBD (C99 TC2) (rdvk#  4)
[ISO C TC2 #34]                                 Thu, 24 Feb 2005 17:17:40 GMT
_____________________________________________________________________________
Accept_____    Accept as marked below_____  Duplicate_____  Reject_____OPEN
Rationale for rejected or partial changes:
Page: 210  Line: 7419  Section: complex.h

Problem:
ISO C TC2 #34

Action:

Change From:

imaginary
  Expands to _Imaginary.
  _Imaginary_I
  Expands to a constant expression of type const float _Imaginary with
  the value of the imaginary unit.

To:

I
  Expands to _Complex_I

[Note from gwc:

I think there may be a problem here with C99 (as amended by TC2).
As far as I can see there is no longer any mention of the imaginary
macro in normative text, which means implementations are not allowed
to define it (because it is not reserved for use by the
implementation). Yet in Annex G it still recommends (in informative
text) that implementations which define __STDC_IEC_559_COMPLEX_
should define the imaginary macro. It also recommends that these
implementations should define I "to be _Imaginary_I (not _Complex_I
as stated in 7.3)". Yet implementations that do so would not comply
with the normative text in 7.3 which requires I to be defined as
_Complex_I.

Assuming that the intention was to allow implementations to follow
the recommendations in Annex G, but by an oversight the necessary
normative text to allow them to do so was omitted from TC2, perhaps
in POSIX we should keep the current text but mark some of it CX?
]
ISO C TC2 #35

Action:
Delete the text
"I
    Expands to either _Imaginary_I or _Complex_I. If _Imaginary_I is
    not defined, I expands to _Complex_I.

The macros imaginary and _Imaginary_I shall be defined if and only if
the implementation supports imaginary types."

ISO C TC2 #36

Action:
Change From:
An application may undefine and then, perhaps, redefine the complex,
imaginary, and I macros.

To:
An application may undefine and then, perhaps, redefine the complex,
and I macros.